



Miami Springs
Police Department

Agenda Item No.

City Council Meeting of:

FEB 28, 2011

Memorandum

To: James R. Borgmann, City Manager

From: Peter G. Baan, Chief of Police

Subject: Red Light Camera System

Date: 02/23/2011

In May of 2010, Governor Charlie Christ signed into law the "Mark Wandall Traffic Safety Act". This legislation sets statewide fines for Red Light Camera violations and establishes system specifications and the violation prosecution process. When a Red Light violation is recorded by a camera system it is forwarded by to the appropriate police department for review to determine if a violation notice will be sent. If it is determined to be appropriate, a violation notice is sent to the registered vehicle owner. The current fine is \$158.00, of which \$75.00 is retained by the county or municipality that deployed the camera system.

For the past few months, the City Administration has been investigating the feasibility of installing "Red Light Cameras" at various intersections within Miami Springs. The major benefit of these cameras is to reduce the number of serious accidents in the City. Various studies have shown that over a period of time the occurrence of serious traffic accidents can be significantly reduced with the installation of this technology. In a preliminary survey, it has been estimated that approximately 20 intersection approaches in Miami Springs would be suitable for installations. The secondary benefit of these systems is revenue production. The vast majority of installations have been a positive revenue source to the respective jurisdictions. Local camera installations are generating an average of approximately \$100,000 in revenue each per year. Currently, 23 jurisdictions within Miami-Dade County have operating systems or contracts to install systems.

A committee consisting of City Manager James Borgmann, Assistant City Manager Ronald Gorland, Finance Director William Alonso, Procurement Specialist Tammy Romero and myself reviewed presentations from three Red Light Camera System vendors. Details such as pricing, operational characteristics, technical and legal support and aesthetics were considered. After careful consideration, it was the unanimous decision of the selection committee to recommend that the City enter into a contract with American Traffic Solutions, Inc. to deploy a Red Light Camera System within the City of Miami Springs.

Attachments

PLEASE COMPLETE ALL SHADED AREAS PLEASE COMPLETE ALL SHADED AREAS PLEASE COMPLETE ALL SHADED AREAS

Request for Quotes		NAME OF BIDDER		NAME OF BIDDER	
Title: Red Light Camera System		American Traffic Solutions (ATS)		Sensys America Inc	
		Contact: Greg Parks		Contact: Carlos Lofstedt	
		Telephone: 1-913-575-2912		Telephone: 786-278-2552	
Item	Description	Price per Camera	Price per Camera	Price per Camera	Price per Camera
1	Price per camera installed	\$ 4,750.00	\$4,600.00-\$4,800.00	Not provided	
2	Is this a fixed fee rate?	Yes	Yes	N/A	
3	Does each lane require a separate camera?	No, includes a four lane approach with up to two (2) signal phases	No, one camera monitors 4 lanes of a given approach	Yes	
4	Per "Amber / Silver Alert" fee		Free for the 1st 120 minutes per month, beyond that is \$15 per hour		
5	Does your system meet FDOT Certification & Specifications?	Yes	Yes, see http://www.dot.state.fl.us/traffic/operations/Operations/dtc.htm		
6	Is your system a single pole installation?	Yes	Yes, the radar detection, camera and flash are all self contained		
7	How Many systems have you installed in Miami-Dade County?	Over 3200 intersections (285 installed systems in Florida)	None Currently		
8	How many of those systems are up and running?	All	N/A		
9	How long from date of contractor to complete installations?	60-90 days	Typically within 90 days		
10	Primary Contractor for installation	Horsepower Electric, Inc.	2 major contractors: Traffic Control Devices and The Signal Group		
11	How long are your contracts for?	No	Typically 3-5 years		
12	Any up front fees?	No	No		
13	What is the camera resolution in megapixels?	16 megapixels	GS11 camera is 11 megapixels and 12 bits of imaging	High Resolution	
14	Can the City retrieve its own data instantly?	Yes, immediate "Go live" process	Yes, with a login archived and live information can be retrieved instantly		
15	Are there any additional costs for areas that need to be hardwired?	No	No, the price the complete price	System will be setup to meet our needs	
16	Do you currently work with another municipality that we can piggyback with?	Yes, Coral Gables or Hialeah	Yes, Holly Hill, FL	Yes, Gulf breeze and Brooksville	
17	Does your system offer a time/date stamp that will hold up in a court of law?		Yes, gold stamp on the image at the time of violation	Offers a full motion video clip of violation	
18	Does your system have infrared for night shots?		Cameras with no flash at all can be used, although this requires photos to be in black & white. Our 120 watt flash offers shots for day and night, unlike the competitors.	Optional	
19	What sets your company apart from the rest?	Largest Red-Light Road Safety Camera provider in North America	GATSO manufacturers ALL the components. We have never lost a court case in 53 years. Only vendor that can provide accurate speed data of vehicles passing through intersections. Customer Service	System is unique because of radar, speed, time and distance detection. Systems are bullet-proof	

SAMPLE CONTRACT

PROFESSIONAL SERVICES AGREEMENT

November 15, 2010

This *Professional Services Agreement* which includes the attached Exhibits ("this **Agreement**") is between **American Traffic Solutions, Inc.** (herein "**ATS**"), with its principal place of business at 7681 East Gray Road, Scottsdale, Arizona, and the City of Miami Springs, Florida (herein "**Customer**"), with principal offices at 201 Westward Drive, Miami Springs, FL 33166. This **Agreement** sets forth the terms and conditions under which **ATS** will furnish the Services described herein to **Customer**.

WITNESSETH:

WHEREAS, **ATS** has the exclusive knowledge, possession and ownership of certain equipment, licenses, and processes for the enforcement of red-light violations through the use of traffic infraction detectors, as defined in Section 316.003(86) of the Florida Statutes, referred to collectively as the "Axis System" (herein the "**Axis System**"); and

WHEREAS, **CUSTOMER** desires to use the Axis System to monitor and enforce red light violations.

WHEREAS, **CUSTOMER** awarded the contract to Vendor pursuant to Ordinance _____, the **CUSTOMER'S** purchasing ordinance, which permits the **CUSTOMER** to purchase services under a contract of another governmental agency or municipality that was awarded pursuant to competitive bids based on clearly defined specifications, and the instant contract is substantially in the form of the contract, as amended, issued to **ATS** by the City of Coral Gables, Florida pursuant to a competitive bid based on clearly defined specifications.

The attached Exhibits include:

Exhibit A.....SERVICE FEE SCHEDULE
Exhibit B.....SCOPE OF WORK
Exhibit C.....INITIAL CAMERA LOCATIONS
Exhibit D.....ACKNOWLEDGEMENT AND CONSENT
Exhibit E.....DMV SUBSCRIBER AGREEMENT

By signing below, each of us agrees to the terms and conditions of this Agreement, which includes the attached Exhibits. This Agreement contains the complete and exclusive statement of the agreement between us relating to the matters referenced herein and replaces any prior oral or written representations or communications between us. Each individual signing below represents that (s)he has the requisite authority to execute this Agreement on behalf of the organization which (s)he represents and that all the necessary formalities have been met. If the individual is not so authorized then (s)he assumes personal liability for compliance under this Agreement.

ACKNOWLEDGED AND AGREED TO BY:

AMERICAN TRAFFIC SOLUTIONS, INC.

CITY OF MIAMI SPRINGS, FLORIDA

By: _____
Adam E. Tuton
Chief Operating Officer

Date

By: _____
Billy Bain, Mayor

Date

ATTEST:

By: _____
Nagalie Valos, City Clerk

Date

This **Agreement** is effective upon the last date as shown on this cover page (the "**Effective Date**").

I. DEFINITIONS

As used in this **Agreement**, the following terms shall have the respective meanings provided below:

1. "**Approach**" means one (1) direction of travel or one (1) or more lanes on a road or a traffic intersection up to four (4) contiguous lanes controlled by up to two (2) signal phases.
2. "**Camera System**" means a photo-traffic monitoring device consisting of one (1) rear camera, strobe, and traffic monitoring device capable of accurately detecting a **Violation** on up to four (4) contiguous lanes which records such data with one (1) or more images of the rear of the vehicle involved in the **Violation**, the vehicle's license tag, and the traffic signal being violated, together with streaming video of the **Violation**. "**Camera System**" shall also, where the sense requires, include any enclosure or cabinet and related appurtenances in which the Axis System is stationed.
3. "**Notice of Violation**" means a written notice of a **Violation** or equivalent instrument issued by or on behalf of **Customer** relating to a **Violation** documented or evidenced by the Axis System.
4. "**Owner**" means the owner(s) of a motor vehicle as shown by the motor vehicle registration records of the motor vehicle department or the analogous agency of another state or country.
5. "**Person**" or "**Persons**" means any individual, partnership, joint venture, corporation, trust, unincorporated association, governmental authority or political subdivision thereof or any other form of entity.
6. "**Project Time Line**" means initial schedule and timelines required to begin the implementation of **Customer's** project.
7. "**Project Business Process Work Flow**" means initial schedules and timelines required to begin the implementation of City's project.
8. "**Recorded Image**" means an image digitally recorded by a "**Camera System**".
9. "**Traffic Control Signal**" means a traffic control device that displays alternating red, yellow and green lights intended to direct traffic when to stop at or proceed through an intersection.
10. "**Traffic Infraction Enforcement Officer**" means an employee of **Customer's** police or sheriff's department who meets the qualifications of Section 316.640(5)(a) of the Florida Statutes.
11. "**Uniform Traffic Citation**" means a uniform traffic citation as described in Section 316.650 of the Florida Statutes.
12. "**Violation**": Means a violation of Section 316.074(1) or Section 316.075(1)(c)1 of the Florida Statutes involving a motor vehicle.
13. "**VIMS (Violation Incident Monitoring System) Analysis**": A statistical assessment of violations rates at suspected problem intersections and approaches to determine the need for an intersection safety camera system.

II. GENERAL TERMS AND CONDITIONS

1. **ATS AGREES TO PROVIDE:** The scope of work identified in Exhibit "B," Section 1.
2. **CUSTOMER AGREES TO PROVIDE:** The scope of work identified in Exhibit "B," Section 2.
3. **TERM AND TERMINATION:**

3.1 The term of this **Agreement** shall be for five (5) years beginning on the date of first issued **Notice of Violation** from the last installed Camera System in the first authorized phase of Camera Systems (the "Start Date") and may be automatically extended for successive five (5) year periods. However, **Customer** may terminate this **Agreement** at the expiration of any term by providing written notice of its intent not to extend the **Agreement** one hundred and twenty (120) days prior to the expiration of the current term.

3.2 **ATS'** services may be terminated:

- (i) By mutual written consent of the parties;
- (ii) For Cause, by either party where the other party fails in any material way to perform its obligations under this **Agreement**. Termination under this subsection is subject to the condition that the terminating party notifies the other party of its intent to terminate, stating with reasonable specificity the grounds therefore, and the other party fails to cure the default within forty-five (45) days after receiving written notice.
- (iii) For Legal Reasons, by either party in the event that state legislation or a decision by a court of competent jurisdiction prohibits the enforcement of Violations using image-capture technology. In any termination for legal reasons, **ATS** shall retain its fees paid up to the date of termination, but the **Customer** shall in no event be responsible for the payment of any of **ATS's** fees or costs in excess of program revenue.

Upon termination of this **Agreement** for any reason, the parties recognize that **Customer** will have to process traffic law violations in the "pipeline", and that **ATS** accordingly must assist **Customer** in this regard. Accordingly, the parties shall take the following actions, and shall have the following obligations, which survive termination during the wind-down period: **Customer** shall cease using the Axis System, shall return or allow **ATS** to recover all provided equipment within a reasonable time not to exceed one hundred and twenty (120) days, and shall not generate further images to be processed. Unless and until directed by **Customer** not to do so, **ATS** shall continue to process all images taken by **Customer** before termination and provide all services associated with processing in accordance with this **Agreement**, and shall be entitled to all Fees specified in the **Agreement** as if the **Agreement** were still in effect.

4. **ASSIGNMENT:**

Neither party may assign all or any portion of this **Agreement** without the prior written consent of the other, which consent shall not be unreasonably withheld or delayed; provided, however, the **Customer** hereby acknowledges and agrees that the execution (as outlined in Exhibit "E"), delivery and performance of **ATS's** rights pursuant to this **Agreement** shall require a significant investment by **ATS**, and that, in order to finance such investment, **ATS** may be required to enter into certain agreements or arrangements ("Financing Transactions") with equipment lessors, banks, financial institutions or other similar persons or entities (each, a "Financial Institution" and collectively, "Financial Institutions"). The **Customer** hereby agrees that **ATS** shall have the right to assign, pledge, hypothecate or otherwise transfer ("Transfer") its rights, or any of them, under this **Agreement** to any Financial Institution in connection with any Financing Transaction between **ATS** and any such Financial Institution subject to the **Customer's** prior written approval, which approval shall not be unreasonably withheld or delayed.

5. **FEES AND PAYMENT:**

- 5.1 **Customer** shall pay for all equipment, services and maintenance based on the fee schedule indicated in the Exhibit "A", Schedule 1 ("Fees").
- 5.2 **Customer** shall pay all Fees due **ATS** based upon invoices from the proceeding month within thirty (30) days of submission. Late payments are subject to interest calculated at 1.5% per month on open balances.
- 5.3 Unit prices will be fixed for the first two (2) years of the first term and thereafter on each anniversary date of the term unit prices will increase by Consumer Price Index (CPI), according to the average change during the prior twelve (12) months in the CPI for All Urban Consumers (CPI-U) for U.S. City average as published by the Bureau of Labor Statistics, U.S. Department of Labor.
- 5.4 **Flexible Payment Plan.** The following term Flexible Payment Plan is hereby added to this amendment and shall only apply to those funds received for violations captured on or

after July 1, 2010 and paid according to the provisions of State Act 2010-80 and is as follows:

During the term of the contract, payments by the Customer may be made to **VENDOR** under a Flexible Payment Plan. Under the Flexible Payment Plan, the Customer may defer certain payments to **VENDOR** until the Customer has collected sufficient funds pursuant to the terms of the contract. If, at the end of the term of the contract, sufficient funds have not been collected by the Customer to pay the balance then due to **VENDOR**, **VENDOR** agrees to waive its right to recovery of any outstanding balance. For purposes of this clause, the term "funds" means the revenue retained by the Customer according to the distribution methods applicable under this contract and applicable state law.

This clause will be applied as follows:

VENDOR will maintain an accounting of any net balances owed to **VENDOR**. If the amount collected during a billing period exceeds the amount of **VENDOR** invoices during the same period, the **CITY** shall pay **VENDOR** the total amount due. If the amount collected during a billing period is less than the amount of **VENDOR** invoices during the same period, the **CITY** shall pay **VENDOR** the amount collected, and may defer payment of the remaining balance. Payments due to **VENDOR** shall be reconciled by applying future funds collected, first to the accrued balance, and then to the invoice for the current billing period. At any time that **VENDOR** invoices, including any accrued balance, are fully repaid, the **CITY** will retain all additional funds collected during that billing period. Such additional funds (whether reserved in cash or not by the **CITY**) will be available to offset future **VENDOR** invoices.

6. INTERSECTION AND VIOLATION RATE ANALYSIS:

Prior to implementing the Axxis System, **ATS** may conduct an analysis of each Approach being considered for a Camera System. If **ATS** deems necessary, **ATS** will use the Axxis VIMS Analysis or other tool(s) or means to complete the analysis over an eight (8) to twelve (12) hour period. **Customer** will be provided a report on violations recorded at each monitored Approach, including the time of day and lanes on which the violations occurred. For any Approach, if available, recommended by **Customer**, **ATS** may install a Camera System. However, **ATS** may elect not to install a Camera System where traffic violation data does not support installation of the Axxis System.

7. COMMUNICATION OF INFORMATION:

ATS agrees that all information obtained by **ATS** through operation of the Axxis System shall be made available to **Customer** at any time during **ATS's** normal working hours, excluding trade secrets and other confidential or proprietary information not reasonably necessary for the prosecution of citations or the fulfillment of **Customer's** obligation under this **Agreement**.

8. CONFIDENTIAL INFORMATION:

No information given by **ATS** to **Customer** will be of confidential nature, unless specifically designated in writing as proprietary and confidential by **ATS** or deemed confidential by operation of law. Provided, however, nothing in this paragraph shall be construed contrary to the terms and provisions of any "Open Records Act" or similar laws, insofar as they may be applicable. **ATS** shall not use any information acquired by this program with respect to any violations or **Customer's** law enforcement activities for any purpose other than the program.

9. OWNERSHIP OF SYSTEM:

It is understood by **Customer** that the System being installed by **ATS** is, and shall remain, the sole property of **ATS**, unless separately procured from **ATS** through a lease or purchase transaction. The System is being provided to **Customer** only under the terms and for the term of this **Agreement**.

10. INDEMNIFICATION AND INSURANCE:

Any Camera System provided by **ATS** pursuant to this **Agreement** shall comply with the maintenance procedures and manufacturer recommendations for that equipment. **ATS** shall indemnify and save harmless **Customer** against claims arising from the **ATS's** negligent or willful

violations of the maintenance procedures and manufacturer recommendations for operation of the **Camera System**.

ATS shall maintain the following minimum scope and limits of insurance:

- 10.1 Commercial General Liability Insurance including coverage for bodily injury, property damage, premises and operations, products/completed operations, personal and advertising injury, and contractual liability with a combined single limit of \$1,000,000 per occurrence. Such insurance shall include **Customer**, its officers, directors, employees, and elected officials as additional insureds for liability arising from **ATS's** operation.
- 10.2 Workers' Compensation Insurance as required by applicable state law, and Employer's Liability Insurance with limits of not less than \$500,000 each accident; **ATS** shall at all times maintain worker's compensation insurance coverage in the amounts required by law, but shall not be required to provide such coverage for any actual or statutory employee of **Customer**.
- 10.3 Comprehensive Business Automobile Liability Insurance for all owned, non-owned and hired automobiles and other vehicles use by **ATS** with a minimum \$1,000,000 per occurrence combined single limit bodily injury and property damage.

Customer and its officers and employees, shall be named as additional insureds on the comprehensive general liability policies provided by **ATS** under this **Agreement**. **ATS** shall require any subcontractors doing work under this **Agreement** to provide and maintain the same insurance, which insurance shall also name **Customer** and its officers, employees, and authorized volunteers as additional insureds.

Certificates showing **ATS** is carrying the above described insurance, and evidencing the additional insured status specified above, shall be furnished to **Customer** within thirty (30) calendar days after the date on which this **Agreement** is made. Such certificates shall show that **Customer** shall be notified of all cancellations of such insurance policies. **ATS** shall forthwith obtain substitute insurance in the event of a cancellation.

Inasmuch as **Customer** is a body politic and corporate, the laws from which **Customer** derives its powers, insofar as the same law regulates the objects for which, or manner in which, or the concerns under which, **Customer** may enter into this **Agreement**, shall be controlling and shall be incorporated by reference into this **Agreement**. **Customer** shall be responsible for vehicle insurance coverage on any vehicles driven by **Customer** employees. Coverage will include liability and collision damage.

11. STATE LAW TO APPLY:

This **Agreement** shall be construed under and in accordance with the laws of the State of Arizona.

12. DISPUTE RESOLUTION:

All disputes arising out of or in connection with the **Agreement** shall be attempted to be settled through good-faith efforts between senior management of both parties, followed if necessary within thirty (30) days by professionally-assisted mediation. Any mediator so designated must be acceptable to each party. The mediation will be conducted as specified by the mediator and agreed upon by the parties. The parties agree to discuss their differences in good faith and to attempt, with the assistance of the mediator, to reach an amicable resolution of the dispute. The mediation will be treated as a settlement discussion and therefore will be confidential. The mediator may not testify for either party in any later proceeding relating to the dispute. No recording or transcript shall be made of the mediation proceedings. Each party will bear its own costs in the mediation. The fees and expenses of the mediator will be shared equally by the parties.

- 12.1 Failing resolution through negotiation or mediation, any remaining dispute shall be submitted to binding arbitration in accordance with the Arbitration Rules for Professional Accounting and Related Services Disputes of the American Arbitration Association ("AAA Rules") before a single arbitrator. The place of arbitration will be mutually agreed upon within 14 days of a decision to seek arbitration. Limited discovery will be permitted in

connection with the arbitration upon agreement of the parties upon a showing of substantial need by the party seeking discovery.

- 12.2 The arbitrator's decision shall follow the plain and natural meaning of the relevant documents, and shall be final and binding. The arbitrator will have no power to award:
- (i) damages inconsistent with the **Agreement**; or,
 - (ii) punitive damages or any other damages not measured by the prevailing party's actual damages, and the parties expressly waive their right to obtain such damages in arbitration or in any other forum.
- 12.3 All aspects of the arbitration will be confidential. Neither the parties nor the arbitrator may disclose the existence, content or results of the arbitration, except as necessary to comply with legal or regulatory requirements.
- 12.4 Each party will promptly pay its share of all arbitration fees and costs, provided that such fees and costs shall be recoverable by the prevailing party as determined by the arbitrator. If a party fails to pay such share promptly upon demand, the arbitrator shall, upon written request by the other party, enter a final and binding decision against the nonpaying party for the full amount of such share, together with an award of attorney's fees and costs incurred by the other party in obtaining such decision, which decision may be entered in any court of competent jurisdiction. Except for the failure of a party to pay arbitration fees and costs that requires resort to the arbitrator to order such payment, the parties will bear their own attorneys' fees in any matter or dispute under this **Agreement**.

13. AMENDMENTS TO THE AGREEMENT:

Customer may from time to time consider it in its best interest to change, modify or extend the terms, conditions or covenants of this **Agreement** or require changes in the scope of services to be performed by **ATS**, or request **ATS** to perform additional services regardless of and without invalidating the process that was used to procure the services enumerated under this **Agreement**. Any such change, addition, deletion, extension or modification, including any increase or decrease in the amount of **ATS**' compensation, must be agreed upon by and between **Customer** and **ATS** incorporated in written amendments (herein "Amendments") to this **Agreement**. Such Amendments shall not invalidate the procurement process or this **Agreement** nor relieve or release **ATS** or **Customer** of any of its obligations under this **Agreement** unless stated therein. No oral amendments, changes, or modifications to this **Agreement** are permitted.

14. LEGAL CONSTRUCTION:

In case any one or more of the provisions contained in this **Agreement** shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision thereof and this **Agreement** shall be construed as if such invalid, illegal, or unenforceable provision had not been contained herein.

15. PRIOR AGREEMENT SUSPENDED:

This **Agreement** constitutes the sole and only agreement of the parties and supersedes any prior understanding, written or oral, between the parties respecting the written subject matter.

16. NO AGENCY:

ATS is an independent contractor providing services to **Customer**, and the employees, agents and servants of **ATS** shall in no event be considered to be the employees, agents or servants of **Customer**. This **Agreement** is not intended to create an agency relationship between **ATS** and **Customer**, except as expressly provided in Exhibit B hereto.

17. FORCE MAJEURE:

Neither party will be liable to the other or be deemed to be in breach of this **Agreement** for any failure or delay in rendering performance arising out of causes beyond its reasonable control and without its fault or negligence. Such causes may include but are not limited to, acts of God or the public enemy, terrorism, significant fires, floods, earthquakes, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather, or governmental authorities approval delays which are not caused by any act or omission by **ATS**. The party whose performance is affected agrees to notify the other promptly of the existence and nature of any delay.

18. TAXES:

In the event that any excise, sales or other taxes are due relating to this **Agreement**, **Customer** will be responsible for the payment of such taxes.

19. OFFER EXTENDED TO OTHER GOVERNMENTAL AGENCIES:

Customer encourages and agrees to ATS extending the pricing, terms and conditions of this Agreement to other governmental entities at the discretion of ATS.

20. NOTICES:

Any notices or demand which, under the terms of this **Agreement** or under any statute, must or may be given or made by **ATS** or **Customer** shall be in writing and shall be given or made by personal service, telegram, first class mail, FedEx, or by certified or registered mail to the parties at the following address:

TO THE CUSTOMER:

City of Miami Springs, Florida
201 Westward Drive
Miami Springs, FL 33166
Attention: James R. Borgmann
City Manager

TO ATS:

American Traffic Solutions, Inc.
7681 East Gray Road
Scottsdale, Arizona 85260
Attention: Adam E. Tuton
Chief Operating Officer

EXHIBIT A
SERVICE FEE SCHEDULE

Description of Pricing

Fees are based on per Camera (approach) and are as follows:

Flat Fee per Camera per Month	\$4,750.00
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Additional Service Fees Include: Certified mail (no return receipt) costs for the mailing of Uniform Traffic Citations for the City will not exceed \$4.00 per certified mailing. City and VENDOR agree to review in good faith one (1) year after execution of this Amendment the certified mail costs.

EXHIBIT B
SCOPE OF WORK

I. ATS SCOPE OF WORK

1.2 ATS IMPLEMENTATION

- 1.2.1 **ATS** agrees to provide the solution for **Camera Systems** to the **Customer** as described in this Agreement, except for those items identified in Section 2 titled "**Customer Scope Of Work**". **ATS** and **Customer** understand and agree that new or previously unforeseen requirements may, from time to time, be identified and that the parties shall negotiate in good faith to assign to the proper party the responsibility and cost for such items. In general, if work is to be performed by the **Customer**, unless otherwise specified, **Customer** shall not charge **ATS** for the cost. All other in-scope work, external to **Customer**, is the responsibility of **ATS**.
- 1.2.2 **ATS** agrees to make every effort to adhere to the Project Time Line agreed upon between the parties.
- 1.2.3 **ATS** will assist **Customer** with video evaluation of candidate sites using the Axis VIMS system.
- 1.2.4 **ATS** will install **Camera Systems** at a number of intersections or grade crossing approaches to be agreed upon between **ATS** and **Customer** after completion of site analyses, unless identified in Exhibit C of this **Agreement**. In addition to any initial locations, the parties may agree from time to time to add to the quantities and locations where **Camera Systems** are installed and maintained.
- 1.2.5 **ATS** will operate each **Camera System** on a 24-hour basis, barring downtime for maintenance and normal servicing activities.
- 1.2.6 **ATS'** in-house Communications Department will assist **Customer** with public information and outreach campaign strategies. In addition, depending upon the agreed-upon strategy, **ATS** may pay for agreed upon extra scope expenditures for public relations consultants, advertising, or media relations provided that such extra scope expenditures will be reimbursed to **ATS** from collected revenue.
- 1.2.7 **ATS** agrees to provide a secure web site (www.violationinfo.com) accessible to **Owners** who have received **Notices of Violation** or **Uniform Traffic Citations** by means of a Notice # and PIN, which will allow violation image and video viewing.
- 1.2.8 **Customer** and **ATS** will complete the Project Business Rules Process Work Flow design within thirty (30) days of the **Effective Date**, unless mutually agreed to otherwise by both parties.
- 1.2.9 Unless otherwise notified, **ATS** will provide technician site visits to each **Camera System** once per month to perform preventive maintenance checks consisting of camera enclosure lens cleaning; camera, strobe and controller enclosure cleaning; inspection of exposed wires; and, general system inspections and maintenance.
- 1.2.10 **ATS** shall repair a non-functional **Camera System** within seventy-two (72) business hours of determination of a malfunction, except for those causes of Force Majeure as outlined in Section 17.0 General Terms and Conditions of this Agreement.
- 1.2.11 **ATS** shall repair the Axis VPS System within one (1) business day from the time of reported outage. Outages of **Customer** internet connections or infrastructure are excluded from this service level.
- 1.2.12 For any **Customer** using **ATS** lockbox or epayment services, **ATS** will establish a demand deposit account bearing the title, "American Traffic Solutions, Inc. as agent for Customer" at U.S. Bank. All funds collected on behalf of **Customer** will identify the

account to receive funds wired from U.S. Bank. **Customer** shall sign a W-9 and blocked account agreement, to be completed by **Customer**, to ensure **Customer's** financial interest in said U.S. Bank account is preserved.

- 1.2.13 **ATS** shall provide training for personnel of the **Customer**, including, but not limited to, the persons who **Customer** shall appoint as Traffic Infraction Enforcement Officers and other persons involved in the administration of the program, regarding the operation of the **ATS** System and the program. This shall include training with respect to the **ATS** System and its operations, strategies for presenting Infractions Data in court and judicial proceedings and a review of the Enforcement Documentation.

1.3 ATS OPERATIONS

- 1.3.1 **ATS** shall provide **Customer** with an automated web-based citation processing system (Axis VPS) including image processing, color printing and mailing of a **Notice of Violation** per chargeable event. Each **Notice of Violation** shall be delivered by first class mail to the **Owner** within the statutory period. Mailings to **Owners** responding to **Notices of Violation** identifying drivers in affidavits or non-liability or by rental car companies are also included according to each pricing option.
- 1.3.2 **ATS** shall act as **Customer's** agent for the limited purpose of making an initial determination of whether **Recorded Images** should be forwarded to the **Traffic Infraction Enforcement Officer** to determine whether a **Violation** has occurred and shall not forward for processing those **Recorded Images** that clearly fail to establish the occurrence of a **Violation**.
- 1.3.3 Text only reminder notices may be delivered by first class or other mail means for additional compensation to **ATS** as agreed by the parties in Exhibit A.
- 1.3.4 Upon expiration of the due date of the **Notice of Violation**, Axis VPS shall issue a **Uniform Traffic Citation**, which shall be delivered by certified mail to the **Owner** within the statutory period. The issuance of the **Uniform Traffic Citation** shall be based on the **Traffic Infraction Enforcement Officer's** approval, as provided in Section 2.4 of this Exhibit A, of the **Notice of Violation**.
- 1.3.5 **ATS** shall make available a form of affidavit, approved by **Customer**, to be used by an **Owner** who wishes to establish the existence of an exemption to a **Notice of Violation** or **Uniform Traffic Citation** as provided in Section 316.0083(1)(d)1 of the Florida Statutes.
- 1.3.6 Axis VPS shall apply an electronic signature to a **Notice of Violation** or **Uniform Traffic Citation**, when authorized to do so by an approving **Traffic Infraction Enforcement Officer**.
- 1.3.7 **ATS** shall obtain in-state vehicle registration information necessary to issue citations assuming that it is named as **Customer's** agent for these purposes.
- 1.3.8 **ATS** shall seek records from out-of-state vehicle registration databases and apply records found to issue **Notices of Violation** and **Uniform Traffic Citations** for **Customer** according to each pricing option.
- 1.3.9 If **Customer** is unable to or does not desire to integrate **ATS** data into its adjudication system, **ATS** shall provide an on-line adjudication processing module, which will enable the adjudication function to review cases, related images, correspondence and other related information required to adjudicate the disputed **Uniform Traffic Citation**. The system will also enable the adjudication staff to accept and account for payments. Any costs charged by a third party vendor related to the provision of **ATS** data to the adjudication system may, at **ATS's** option, be advanced to or on behalf of **Customer**,

and recovered by **ATS** from **Customer** as an additional charge on its invoice submitted to **Customer** pursuant to Section 5 of this **Agreement**.

- 1.3.10 **Customer** shall be able to use the Axis VPS System to run and print standard system reports.
- 1.3.11 If required by the Court or prosecutor, **ATS** shall provide **Customer** with, or train a local expert witness able to testify in Court on matters relating to the accuracy, technical operations, and effectiveness of the Axis System until judicial notice is taken.
- 1.3.12 In those instances where damage to a **Camera System** (or sensors where approved) is caused by negligence on the part of **Customer** or its authorized agent(s), **ATS** will provide **Customer** an estimate of the cost of repair. Upon authorization to proceed with the repairs or replacement, **ATS** shall replace or repair any damaged equipment and invoice **Customer** for the pre-approved repair cost. **ATS** shall bear the cost to replace or repair equipment damaged in all other circumstances.
- 1.3.13 **ATS** shall provide a help-line to assist **Customer** resolve any problems encountered regarding its Camera System and/or citation processing. The help-line shall function during normal business hours.
- 1.3.14 As part of its Camera System, **ATS** shall provide **Owners** with the ability to view **Recorded Images of Violations** involving their motor vehicles online. This online viewing system shall include a link to the **ATS** payment website(s) and may offer the opportunity to download a form affidavit to establish an exemption under Section 316.0083(1)(d) of the Florida Statutes. Online-obtained affidavits submitted in response to a **Notice of Violation** or **Uniform Traffic Citations** shall be directed to and processed by **ATS** and communicated to **Customer** via the Axis System.

II. CUSTOMER SCOPE OF WORK

2.2 GENERAL IMPLEMENTATION REQUIREMENTS

- 2.2.1 Within seven (7) business days of the **Effective Date**, **Customer** shall provide **ATS** with the name and contact information for a project manager with authority to coordinate **Customer** responsibilities under this **Agreement**.
- 2.2.2 Within seven (7) business days of the **Effective Date**, **Customer** shall provide **ATS** with the name and contact information for a **Uniform Traffic Citation** manager responsible for oversight of all **Uniform Traffic Citation**-related program requirements.
- 2.2.3 Within seven (7) business days of the **Effective Date**, **Customer** shall provide **ATS** with the name(s), contact information, and electronic signature(s) of all **Traffic Infraction Enforcement Officers** authorized by **Customer's** police or sheriff's department to approve and issue **Notices of Violation** and **Uniform Traffic Citations**.
- 2.2.4 **Customer** shall establish a method by which an **Owner** who has received a **Notice of Violation** or a **Uniform Traffic Citation** may review the images and video evidencing the **Violation** at www.violationinfo.com free of charge. This may be at a publicly available terminal at a **Customer** facility or by appointment with the **Uniform Traffic Citation** manager.
- 2.2.5 **Customer** shall make every effort to adhere to the Project Implementation Timeline to be agreed upon between both parties.
- 2.2.6 **Customer** shall direct the Chief of Police or approved alternate to execute the **ATS** DMV Subscriber Services Agreement (Exhibit F) to provide verification to the State Department of Motor Vehicles, National Law Enforcement Telecommunications System, or appropriate authority indicating that **ATS** is acting as an Agent of **Customer** for the purposes of accessing vehicle ownership data pursuant to the list of permissible

uses delineated in the Drivers Privacy Protection Act 18 U.S.C. 2721, Section (b) (1) and as may otherwise be provided or required by any provision of applicable state law.

2.2.7 **Customer** and **ATS** shall complete the Project Business Process Work Flow design within thirty (30) calendar days of last contract execution date.

2.2.8 **Customer** is responsible for notifying **ATS** of any legislative and/or ordinance changes in writing within forty-eight (48) hours of the first read or proposed legislation. **ATS** will not be responsible for any damages if not notified within time noted.

2.2.9 **Customer** is responsible for all final jurisdictional issues.

2.3 STREETS AND TRAFFIC DEPARTMENT OPERATIONS

2.3.1 If **Customer** chooses to move a Camera System to a new approach after initial installation, it shall pay the costs to relocate the System.

2.3.2 **Customer** will design, fabricate, install and maintain red light camera warning signs required by law to be posted in connection with the use of a **Camera System**. If **Customer** cannot provide such signage, **ATS** will do so and charge the costs to **Customer**.

2.3.3 **Customer** shall provide access to traffic signal phase connections according to approved design.

2.3.4 **Customer** shall allow **ATS** to access power from existing power sources at no cost and shall allow or facilitate access to traffic signal phase connections to a pull box, pole base, or controller cabinet nearest to each Camera System within **Customer's** jurisdiction. The costs of any additional conduit or power infrastructure needed to support installation of the Camera System shall be funded by **Customer**. **ATS** may agree to cover these upfront costs and recover the costs from the collected revenue in addition to its normal fees.

2.3.5 **Customer** shall approve or reject **ATS's** submitted plans within seven (7) business days of receipt and shall limit iterations to a total of one revision beyond the initially submitted plans. Total plan approval duration shall not exceed ten (10) business days.

2.3.6 **Customer** shall not charge **ATS** or its subcontractor(s) for building, construction, electrical, street use and/or pole attachment permits.

2.3.7 **Customer** shall make every effort to issue all needed permits to **ATS** and its subcontractor(s) within three (3) business days of plan approval.

2.3.8 **Customer** shall allow **ATS** to install vehicle detection sensors in the pavement of roadways within **Customer's** jurisdiction, as permitted.

2.3.9 **Customer** shall allow **ATS** to build needed infrastructure into any existing **Customer** owned easement, as permitted.

2.3.10 If use of private property right of way is needed, **Customer** shall assist **ATS** in acquiring permission to build in existing utility easements as necessary. Any additional cost for private property right of way lease/rental costs shall be borne by **Customer**.

2.4 LAW ENFORCEMENT DEPARTMENT OPERATIONS

2.4.1 **Customer's Traffic Infraction Enforcement Officer(s)** shall process each potential violation in accordance with State Law and/or Municipality Ordinances within three (3) business days of its appearance in the Law Enforcement Review Queue, using Axisis to determine which violations will be issued as **Notices of Violation**.

- 2.4.2 Within seven (7) days of last contract execution, **Customer** shall provide **ATS** with a form of **Uniform Traffic Citation** that complies with the provisions of Chapter 316 of the Florida Statutes, with the understanding that some modifications may be necessary to enable use with **ATS's** systems.
- 2.4.3 If an owner who receives a **Notice of Violation** fails to pay the statutory penalty or submit an affidavit that complies with all requirements provided in Section 316.0083(1)(d) of the Florida Statutes within the time period provided in Section 316.0083(1)(b) of the Florida Statutes, the issuance of a **Uniform Traffic Citation** will automatically occur based on the prior **Traffic Infraction Enforcement Officer** approval of the **Notice of Violation**.
- 2.4.4 **Customer** shall provide **ATS** with instructions or specifications for the treatment of affidavits, with the understanding that some modifications may be necessary to ensure compatibility with **ATS's** processes.
- 2.4.5 For optimal utilization, **Customer** workstation computer monitors for citation review and approval should provide a resolution of 1280 x 1024.
- 2.4.6 For optimal data throughput, **Customer** workstations should be connected to a high-speed internet connection with bandwidth of T-1 or greater.
- 2.4.7 **Customer** shall provide signatures of all authorized Law Enforcement users who will review events and approve citations on forms provided by **ATS**.

2.5 ADJUDICATION OPERATIONS

- 2.5.1 If **Customer** does not provide payment processing services, **Customer** shall use **ATS** payment processing services. The fees for lockbox and epayment services are presented in Exhibit A.
- 2.5.2 **Customer** shall provide a magistrate, judge or hearing officer and adjudication facilities to schedule and hear disputed **Uniform Traffic Citations**.
- 2.5.3 **Customer** shall handle inbound and outbound phone calls and correspondence from defendants who have questions about disputes, and other issues relating to citation adjudication. **Customer** may refer citizens with questions regarding **ATS** or Axis technology and processes to websites and/or toll free telephone numbers provided by **ATS** for that purpose.
- 2.5.4 Any potential, one time, direct costs to **ATS** to develop an interface between a court system will be initially paid by **ATS** and any such cost will be reimbursed to **ATS** from collected revenues in addition to its normal fees in Exhibit A.

2.6 INFORMATION TECHNOLOGY DEPARTMENT OPERATIONS

- 2.6.1 In the event that remote access to the **ATS** Axis VPS System is blocked by **Customer** network security infrastructure, **Customer's** Department of Information Technology shall coordinate with **ATS** to facilitate appropriate communications while maintaining required security measures.

EXHIBIT C
DESIGNATED INTERSECTIONS

Customer will designate first phase implementation of cameras at designated intersection approach or approaches. **ATS** shall make its best efforts to install a camera system within thirty (30) days of permits being granted and power delivered for each agreed upon approach, providing that **Customer** has received permission for all implementations in writing from any third-party sources.

Implementation and installation of any designated intersection approach is subject to site and/or video analysis and, law enforcement and engineering results. Additional intersection approaches may be selected in addition to first phase implementation and may be selected based on traffic crash data, traffic citation data, law enforcement officer observations and/or video survey of violations of **Customer's** designated intersection(s). **ATS** may provide **Customer** with evaluation of candidate approach sites using the AXIS VIMS system or some other means to assist **Customer** in its recommendations.

EXHIBIT D
ACKNOWLEDGEMENT AND CONSENT

This Acknowledgement and Consent, dated as of _____, is entered into by and between the City of Miami Springs, Florida (the "Customer") and America Traffic Solutions, Inc., a Kansas Corporation ("ATS"), with reference to the Professional Services Agreement dated as of _____, 2010, by and between the Customer and ATS (the "Agreement").

1. ATS has entered in a Credit Agreement, dated as of September 22, 2005 (the "ATS Credit Agreement"), with Harris N.A. (the "Bank"), pursuant to which the Bank has provided certain financing to ATS. Such credit facilities will provide ATS the working capital that it needs to perform its obligations to the Customer under the Agreement.

2. Pursuant to ATS Credit Agreement, ATS has granted Harris a security interest in all of ATS's personal property as collateral for the payment and performance of ATS's obligations to the Bank under the ATS Credit Agreement.

3. ATS will not, by virtue of the ATS Credit Agreement, be relieved of any liability or obligation under the Agreement, and the Bank has not assumed any liability or obligation of ATS under the Agreement.

4. The Customer hereby acknowledges notice of, and consents to, ATS's grant of such security interest in favor of the Bank in all of ATS's rights and interests under the Agreement pursuant to the ATS Credit Agreement.

5. All payments due and to become due to ATS pursuant to the Agreement shall continue to be paid directly to ATS, unless and until the Bank notifies the Customer in writing to do otherwise. If the Bank so notifies the Customer, the Customer will immediately cease making such payments and distributions to ATS and will as soon as possible, but in any event within 5 days after receiving such notice, remit all such payments directly to the Bank at 111 West Monroe Street, Chicago, Illinois 60603. ATS agrees that any such payment to the Bank shall be a good receipt and acquittance as against it – that is to say, the Customer should make the payment directly to the Bank and in so doing, the Customer discharges any liability to ATS for the payment, and the Customer shall have no obligation to ATS to investigate whether the Bank has any right to make such a direction.

6. The Customer further acknowledges and agrees that this Acknowledgement and Consent shall be binding upon the Customer and shall inure to the benefit of the successors and assigns of the Bank and to any replacement lender which refinances ATS's obligations to the Bank under the ATS Credit Agreement.

EXHIBIT E
DMV SERVICES SUBSCRIBER AGREEMENT

ATS requires that your agency certify the intended use of the information made available to your agency through our services and that such uses are in compliance with the Federal Driver's Privacy Protection Act Title XXXI and other applicable laws governing dissemination of public records. Based on your agency's intended use of such information, ATS will either grant permission to use the service or deny the application. Please specify any of the following permissible uses under §2721 that apply:

- ☐ (1) For use by any government agency, including any court or law enforcement agency, in carrying out its functions, or any private person or entity acting on behalf of a Federal, State or local agency in carrying out its functions.
- ☐ (4) For use in connection with any civil, criminal administrative, or arbitral proceeding in any Federal, State, or local court or agency or before any self-regulatory body, including the service of process, investigation in anticipation of litigation, and the execution or enforcement of judgments and orders, or pursuant to an order of a Federal, State, or local court.
- ☐ (7) For use in providing notice to the owners of towed or impounded vehicles.
- ☐ (10) For use in connection with the operation of private toll transportation facilities.

In consideration of ATS making its Services available, Subscriber agrees to:

- i) utilize ATS provided data only for the purpose(s) specified above; and
- ii) request such information only for the Subscriber's exclusive use in the ordinary course of Subscriber's business and not for resale.

I certified that I am authorized to execute the Subscribe Use Certification on behalf of the Subscriber listed below. On behalf of such Subscriber, I certify that the above statements are true and correct. Subscriber acknowledges and agrees that ATS may from time to time audit Subscriber's use of ATS' Services to ensure that such use is consistent with the intended uses set forth above and with all applicable laws.

This agreement shall be for _____ year(s) commencing on the date below and shall automatically renew annually. This agreement may be terminated within thirty (30) days notice of the anniversary date, annually.

SUBSCRIBER INFORMATION					
Subscriber Agency/Name:					
NLETS Agency ORI:					
Name of Authorized Representative:					
Title of Authorized Representative:					
Mailing Address:					
City:		State:		Zip Code:	
Telephone:	() -	Fax:	() -	Email:	

Signature of Authorized Representative:	
Date Signed:	

SAFETY STUDY

**Effects of Red Light Camera Enforcement
on Fatal Crashes in Large US Cities**

Wen Hu
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February 2011

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Abstract

Objective: To estimate the effects of red light camera enforcement on per capita fatal crash rates at intersections with signal lights.

Methods: From the 99 large US cities with more than 200,000 residents in 2008, 14 cities were identified with red light camera enforcement programs during 2004-08 but not during 1992-96, and 48 cities were identified without camera programs during either period. Analyses compared the citywide per capita rate of fatal red light running crashes and the citywide per capita rate of all fatal crashes at signalized intersections during the two study periods, and rate changes then were compared for cities with and without cameras programs. Poisson regression was used to model crash rates as a function of red light camera enforcement, land area, and population density.

Results: The average annual rate of fatal red light running crashes declined for both study groups, but the decline was larger for cities with red light camera enforcement programs than for cities without camera programs (35 vs. 14 percent). The average annual rate of all fatal crashes at signalized intersections decreased by 14 percent for cities with camera programs and increased slightly (2 percent) for cities without cameras. After controlling for population density and land area, the rate of fatal red light running crashes during 2004-08 for cities with camera programs was an estimated 24 percent lower than what would have been expected without cameras. The rate of all fatal crashes at signalized intersections during 2004-08 for cities with camera programs was an estimated 17 percent lower than what would have been expected without cameras.

Conclusions: Red light camera enforcement programs reduce the citywide rate of fatal red light running crashes and, to a lesser but still significant extent, the rate of all fatal crashes at signalized intersections. Cities wishing to reduce fatal crashes at signalized intersections should consider red light camera enforcement.

1. Introduction

More than 2.2 million police-reported motor vehicle crashes in the United States in 2009 occurred at intersections or were intersection related, accounting for about 41 percent of all police-reported crashes. These crashes resulted in 81,112 serious nonfatal injuries and 7,358 deaths. About one-third of the deaths occurred at intersections with signal lights (Insurance Institute for Highway Safety, 2010a).

Running a red light is a common traffic violation. A study of traffic at 19 intersections in 4 states reported an average of 3.2 red light running events per hour per intersection (Hill and Lindly, 2003). In a national telephone survey conducted in 2010, 93 percent of drivers said it is unacceptable to go through a red light if it is possible to stop safely, but one-third reported doing so in the past 30 days (AAA Foundation for Traffic Safety, 2010).

The safety consequences of running red lights are considerable. A study of urban crashes reported that running red lights and other traffic controls was the most common type of crash (22 percent). Injuries occurred in 39 percent of crashes in which motorists ran traffic controls (Retting et al., 1995). In 2009, 676 people were killed and 113,000 were injured in crashes in which police were able to establish that drivers ran red lights. Sixty-four percent of these deaths were people other than the red light runners, including passengers in the red light running vehicles, occupants of the other vehicles, pedestrians, and bicyclists. Compared with the drivers involved in these crashes who did not violate the signal, red light runners were more likely to be male, to be younger than 30, and to have prior crashes, alcohol-impaired driving convictions, or citations for speeding or other moving violations. Violators also were much more likely to have been speeding or alcohol impaired at the time of the crash, and less likely to have had a valid driver's license (Insurance Institute for Highway Safety, 2010b).

A high likelihood of apprehension helps convince motorists to comply with traffic laws, but many enforcement agencies have insufficient personnel to mount effective enforcement programs using traditional police patrols. Red light cameras can supplement traditional methods of enforcement at intersections, especially at times of the day and on roads where traditional enforcement can be difficult or hazardous. Studies have reported reductions in red light violations of 40-96 percent after the introduction

of red light cameras (Retting et al., 1999a, 1999b; Retting et al., 2008), and reductions occurred not only at camera-equipped sites but also at signalized intersections without cameras. A study of the impact of red light camera enforcement on crashes in Oxnard, California, one of the first US communities to employ such cameras, reported significant citywide reductions in crashes at intersections with traffic signals, with injury crashes reduced by 29 percent (Retting and Kyrychenko, 2002). Right-angle collisions, the crash type most closely associated with red light running, at these intersections declined by 32 percent, and right-angle crashes involving injuries fell by 68 percent.

Some studies have reported that even though red light cameras reduce front-into-side collisions and overall injury crashes, they can increase rear-end crashes. A study evaluating red light camera programs in 7 communities reported a 25 percent reduction in right-angle crashes, whereas rear-end crashes increased by 15 percent. Because the types of crashes prevented by red light cameras tend to be more severe and more costly than the additional rear-end crashes that can occur, the study estimated a positive social benefit of more than \$18.5 million in the 7 communities (Council et al., 2005). Not all studies have reported increases in rear-end crashes. A review of 10 controlled before-after studies of red light camera effectiveness that adjusted for regression to the mean, spillover effects, or both, reported an estimated 13-29 percent reduction in all types of injury crashes, a 24 percent reduction in right-angle injury crashes, and a nonsignificant 18 percent reduction in rear-end injury crashes (Aeron-Thomas and Hess, 2005).

Red light cameras have proven to be controversial in some US communities, but the number of communities that implemented camera programs during 1992-2010 has increased dramatically, from no communities in 1992 to 25 communities in 2000 and 501 communities in 2010 (Figure 1).

Numerous studies have examined the effects of red light camera enforcement on all crashes or crashes involving injury, but few if any studies have examined the effects on fatal crashes. The present study evaluated the effect of camera enforcement on per capita fatal crash rates for large US cities. Changes in per capita rates of fatal red light running crashes were compared for cities with and without camera programs. Because prior research reported citywide effects of red light cameras on all crashes at

signalized intersections, the present study also examined changes in the rates of all fatal crashes at signalized intersections in these cities.

2. Method

Large US cities were defined in this study as those with more than 200,000 residents; there were 99 such cities in 2008 (US Census Bureau, 2009). Information on red light camera programs in these 99 cities was obtained from news reports and calls to city police departments or public works departments. For cities with camera enforcement, program start and end dates were obtained. Other historical information was sought but was not available for all cities, including the number of cameras and number of signalized intersections over time.

Calendar years 2004-08, the latest 5 years for which fatal crash data were available, represented the “after” study period. Calendar years 1992-96 represented the “before” study period; very few US communities had camera programs during this time (Figure 1). The 14 cities with camera programs during 2004-08 but not during 1992-96 comprised the camera group. The 48 cities without camera programs during either time period comprised the comparison group. Of the remaining cities, 4 cities implemented camera programs prior to 1997, and 33 cities had camera programs for some but not all of the 2004-08 period. These 37 cities were excluded from analyses.

Data on fatal crashes at intersections with signal lights were extracted for 1992-96 and 2004-08 from the Fatality Analysis Reporting System (FARS), which contains detailed information on all fatal motor vehicle crashes occurring on US public roads (National Highway Traffic Safety Administration, 1992-96, 2004-08). Fatal red light running crashes were defined as the subset of these crashes that involved a driver traveling straight who was assigned the driver level contributing factor of “failure to obey traffic control devices.” This definition was developed jointly by the Insurance Institute for Highway Safety and Federal Highway Administration so that consistent estimates of red light running crash losses would be produced (Retting, 2006).

Annual population estimates were obtained for each city from the US Census Bureau (1997, 2009). For each city in each study period and for each crash measure, the average annual per capita fatal crash rate (crashes per million population) was calculated by summing fatal crashes across the 5-year period and then dividing by the sum of the annual population counts. This resulted in two observations (one each for the before and after periods) per city for the rate of fatal red light running crashes and for the rate of all fatal crashes at signalized intersections. To study the citywide effect of camera enforcement on fatal crash rates, the per capita crash rates were computed for each study group for the 2004-08 period, aggregating crashes and population across the cities in each group, and these rates were compared with those for the 1992-96 period.

Using the city-specific data, Poisson regression models were used to more rigorously examine the relationship of camera enforcement and other variables with fatal crash rates. The Poisson models accounted for the covariance structure due to repeated measures because each independent unit of analysis (city) had two observations (before and after periods). Separate models were developed for the rate of fatal red light running crashes and the rate of all fatal crashes at signalized intersections. Independent variables in the model were population density (in thousands of people per square mile for each study period), land area (in square miles for each study period), study period (after vs. before), and city group (cities with camera programs during the after period vs. cities without cameras). Land area was included because large area changes potentially could confound the relationship between camera enforcement and fatal crash rates. Census information on cities' land areas is available only from the decennial reports (US Census Bureau, 1990, 2000). Therefore, the 1990 land area data were used for the before period and the 2000 data were used for the after period. The population density during the before period was calculated as the average annual population during 1992-96 divided by the 1990 land area, and the population density during the after period was calculated as the average annual population during 2004-08 divided by the 2000 land area. An interaction variable for study period and city group tested whether crash trends were different for cities with and without camera programs. The difference in modeled crash trend between cities with camera program and those without was taken as the primary

measure of effectiveness. It was interpreted as the change in fatal crash rate for cities with camera programs beyond what would have been expected absent the programs. Variables with p-values less than 0.05 were taken as statistically significant.

3. Results

The 62 large US cities studied accounted for 10 percent of the US population, 14 percent of all fatal red light running crashes, and 15 percent of all fatal crashes at signalized intersections in 2008.

Figures 2 and 3 show the percentage changes in average annual per capita fatal crash rates for cities with and without red light camera enforcement programs, respectively. Detailed population and crash data for each city are listed in Appendix A. All but two of the 14 cities with camera programs experienced reductions in the rate of fatal red light running crashes, and all but three experienced reductions in the rate of all fatal crashes at signalized intersections (Figure 2). Among the cities with camera programs that experienced reductions in both fatal crash rates, all but one city had percentage reductions for fatal red light running crashes that were larger than those for all fatal crashes at signalized intersections. Among the 48 cities without camera programs, the pattern of changes in crash rates was much more variable. About half of the cities experienced reductions in the rate of fatal red light running crashes, and about half experienced increases. More than one-third of the cities experienced reductions in the rate of all fatal crashes at signalized intersections (Figure 3).

Table 1 lists combined results for the camera and comparison groups. The average annual rate of fatal red light running crashes declined for both study groups, but the decline was larger for cities with camera programs than for cities without cameras (35 vs. 14 percent). The average annual rate of all fatal crashes at signalized intersections decreased by 14 percent for cities with camera programs and increased slightly (2 percent) for cities without cameras. For cities with camera programs, the percentage decline in the annual average rate of fatal red light running crashes was much higher than the decline in the rate of all fatal crashes at signalized intersections (35 vs. 14 percent).

Table 2 lists results of the Poisson regression model that estimated the effects of red light camera enforcement and other predictors on the per capita rate of fatal red light running crashes. No significant effect was associated with land area. After accounting for the effects of other predictors, an increase in population density (in thousands of people per square mile) reduced the rate of fatal red light running crashes by an estimated 4 percent ($[\exp(-0.0371)-1]\times 100$), a marginally significant difference. After accounting for the interaction of study period and city group, the fatal crash rate during the before period was an estimated 65 percent higher ($[\exp(0.4998)-1]\times 100$) for cities that later implemented camera programs compared with cities that did not. The rate of fatal red light running crashes between 1992-96 and 2004-08 was reduced by an estimated 16 percent ($[\exp(-0.1709)-1]\times 100$) for cities without camera programs and by an estimated 36 percent ($[\exp(-0.1709-0.2809)-1]\times 100$) for cities with cameras. The estimated effect of camera enforcement on the rate of fatal red light running crashes was obtained by interpreting the interaction term for study period and camera use directly. Based on this parameter, the rate of fatal red light running crashes during 2004-08 for cities with cameras programs was 24 percent lower ($[\exp(-0.2809)-1]\times 100$) than what would have been expected without cameras.

Table 3 lists results of the Poisson regression model that estimated the effects of red light camera enforcement and other predictors on the per capita rate of all fatal crashes at signalized intersections. After accounting for the effects of other predictors, neither land area nor population density was significantly associated with the crash rate. After accounting for the interaction of study period and city group, the per capita rate of all fatal crashes at signalized intersections during the before period was an estimated 32 percent higher ($[\exp(0.2812)-1]\times 100$) for cities that later implemented camera programs compared with cities that did not. The rate of all fatal crashes at signalized intersections between 1992-96 and 2004-08 changed only minimally for cities without camera programs and was reduced by an estimated 16 percent for cities with cameras ($[\exp(0.0112-0.1822)-1]\times 100$). Based on the interaction term for study period and camera use, the actual per capita rate of all fatal crashes at signalized intersections during 2004-08 for cities with camera programs was 17 percent lower ($[\exp(-0.1822)-1]\times 100$) than what would have been expected without cameras.

Land areas for 19 of the 62 study cities (4 camera cities and 15 comparison cities) increased by more than 10 percent between 1990 and 2000. Additional Poisson regression models were conducted that excluded these cities, and results changed little.

4. Discussion

Red light running is a frequent traffic violation, and the safety consequences have been established. Enforcing red light laws is important, but many communities do not have the resources for police to patrol intersections as often as would be needed to ticket most motorists who run red lights. Traditional police enforcement also poses special difficulties for police, who in most cases must follow a violating vehicle through a red light to stop it. This can endanger motorists and pedestrians as well as officers.

Before-after studies in communities that have implemented red light camera enforcement programs have reported reductions in red light running, not only at camera-equipped intersections but also at other signalized intersections without cameras (Retting et al., 1999a, 1999b), as well as citywide crash reductions at signalized intersections (Retting and Kyrychenko, 2002). The current study extends this research by examining the effects of camera enforcement on fatal crashes in large US cities. Based on Poisson regression models, camera programs were associated with statistically significant citywide reductions of 24 percent in the rate of fatal red light running crashes and 17 percent in the rate of all fatal crashes at signalized intersections, when compared with rates that would have been expected without cameras. The larger effect of camera enforcement on the rate of fatal red light running crashes would be expected because these are the crashes targeted by cameras. The significant reduction in the rate of all types of fatal crashes at signalized intersections indicates that cameras have a generalized effect on driver behavior at intersections that extends beyond running red lights.

Other factors also were found to influence fatal crash rates. Higher population densities were associated with lower fatal crash rates. A possible explanation is that denser populations generally lead to lower travel speeds and thus fewer fatal crashes (Cerrelli, 1997). Rates of fatal crashes during the

baseline period were higher for cities that subsequently implemented red light camera programs than for cities that did not implement camera programs. It is to be expected that cities with larger red light running problems should have been more likely to implement camera enforcement programs.

Several limitations of the study are worth noting. The definition of red light running crashes excluded some crashes such as those involving a driver making an illegal turn on red. Other factors not considered may have influenced fatal crash rates for the camera cities but could not be examined due to limitations in the data. Attempts were made to obtain historical information on the number of red light cameras in the study cities, but information on the scope of red light programs could not be obtained for many of the cities. Historical information also was sought on the number of signalized intersections but was unavailable in many cities.

Red light cameras are not the only countermeasure for reducing crashes at signalized intersections. Converting traditional intersections to roundabouts eliminates the need for traffic signals as well as cameras. It has been reported that conversion of traditional intersections to roundabouts reduces fatal crashes by 81-90 percent, injury crashes by 25-87 percent, and overall crashes by 37-61 percent (Federal Highway Administration, 2000; Persaud et al., 2001; Schoon and van Minnen, 1994; Troutbeck, 1993). However, it is not feasible to replace every traffic light with a roundabout, and not every intersection is appropriate for a roundabout. Better enforcement of traffic signals using cameras is a solution that can be implemented quickly on a large scale.

In tallying the costs and benefits of camera enforcement, communities should factor in the considerable social and economic benefits of successfully reducing crashes. Besides foregone medical costs, vehicle repair bills, travel delays, and lost income, citizens in communities with camera enforcement experience direct savings in terms of reduced police time to investigate and report crashes, lessened need for emergency response service, and lower roadway cleanup costs.

National surveys of drivers and surveys conducted in cities with and without red light camera programs have found that a large majority support camera enforcement (Garber et al., 2005; National Highway Traffic Safety Administration, 2004; Retting and Williams, 2000). Despite the widespread

support and the safety benefits of red light camera enforcement, cameras remain controversial in some communities where opponents raise concerns about “big brother” government tactics and claim that violators are victims of revenue-generating government schemes. In the current study, the cities that implemented red light camera programs had higher baseline crash rates, suggesting that government officials were motivated by safety concerns. Although automated traffic enforcement is not a panacea, the current study adds to the large body of evidence that red light cameras can prevent the most serious crashes. This evidence should be considered by communities seeking to reduce crashes at intersections.

Acknowledgements

The authors appreciate the assistance of Nathan Oesch in obtaining information about the study cities and red light camera programs and the contributions of Ivan Cheung in developing the study approach. This work was supported by the Insurance Institute for Highway Safety.

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NEWS ARTICLES

Red-light cameras save lives, study says

By Ashley Halsey III

Washington Post Staff Writer

Tuesday, February 1, 2011; 12:14 AM

Red-light cameras are saving lives even as they make millions in revenue, according to the first definitive study of the subject.

Use of cameras to catch speeders and those who run red lights has proliferated in the past decade, greatly increasing the prospect that drivers in too much of a hurry will get caught. The flash of a camera has become common at District intersections, more than 50 of which are equipped to catch red-light offenders.

A study to be released Tuesday by the Insurance Institute for Highway Safety finds that traffic fatalities at those intersections dropped by 26 percent over a five-year period, slightly more than the average decline in 13 other camera-equipped cities.

"We're hopeful this will stop some of the backlash against cameras," said Adrian Lund, president of the insurance foundation. "Much of the attention to victims of the camera has been paid to people who received tickets. Hopefully, this will return the focus to the people who have been killed or injured by red-light running."

Drivers often denounce use of the cameras as a naked money-making scheme - and the District made almost \$7.2 million on 85,678 red-light tickets from June 2009 through May.

At the same time, almost anyone who regularly drives District streets will attest to the fact that drivers slow in places where they know speed cameras are located and are more likely to stop on yellow at intersections with red-light cameras.

"Our traffic fatalities have been cut in half in four years," said D.C. Police Chief Cathy L. Lanier. "We see less high-speed crashes, we see less crashes at what used to be the worst intersections. Because of speed enforcement, when people do crash, it's at a slower speed, so there are less likely to be fatalities."

Lanier also said the cameras conserve police resources. "Those automated enforcement programs can take the place of 100 officers. In order to have the same effect with police officers, I'd have to divert them from crime-fighting."

The institute study said there were five fewer deaths at the District's camera-equipped lights over five years. During that same period across the country, 159 fewer people died in the cities that use cameras, the study found. If cameras had been in use in all cities with populations above 200,000, the institute projected that 815 lives would be saved.

The report looked at 14 cities that had camera programs from 2004 to 2008 and compared their accident rates with those of 48 cities that did not have cameras during the same period. The report acknowledged

that earlier studies found an increase in rear-end collisions when red-light cameras were installed. But it said that because right-angle crashes cause more severe injuries and damage than rear-end ones, the net effect was positive.

The institute used police reports gathered by the federal government to analyze intersection mayhem. The 2.2 million intersection crashes recorded in 2009 made up about 41 percent of all accidents. They resulted in 81,112 serious injuries and 7,358 deaths.

Police established red-light running as the cause of 676 deaths and 113,000 injuries. The vast majority of the people who died - 64 percent - were not driving the vehicle that ran the light. They were passengers, other drivers, pedestrians and cyclists.

"This is a solid report," said John B. Townsend II of AAA Mid-Atlantic. "It offers evidence that the program is changing behavior. Of all the forms of automated enforcement, this one's going to stay because the one thing people fear is a T-bone crash."

A survey of D.C. drivers in December by AAA found 8 percent opposed red-light cameras.

"There simply are not enough resources to put a police officer at every intersection, and enforcement at intersections is often dangerous," said Barbara Harsha, executive director of the Governors Highway Safety Association. "We have known for years that when the public sees a law being enforced, they will respect it and drive more safely. That has been true with drunk driving and seat-belt laws, and it is also true with red-light cameras."

However, traffic cameras still enliven constituent hotlines as angry drivers who have gotten tickets in the mail berate people who pick up the phones for legislators and council members.

"A lot of people accuse us of tricking them," Lanier said, "but we publish the location of all the cameras on our Web site. We're not trying to hide where they're located from anyone."

Two legislators have introduced bills in Richmond to restrict use of the cameras. One would restrict local jurisdictions from deploying new red-light cameras; the other would require that their use be overseen by the Virginia Department of Transportation.

"We're opposed to the first bill," Townsend said, "and we think the second one would put an onerous burden on the process."

Red-light cameras get results

Saturday, February 5, 2011; 6:19 PM

THE EVIDENCE is incontrovertible that red-light cameras save lives and could save many more if they were in wider use. They do so mainly by deterring and reducing the number of side-impact accidents, known as T-bone crashes. The rancorous, misguided debate over the cameras, which capture images of vehicles as they run through red traffic lights, is now settled. The District and other cities are well justified in expanding the deployment of such life-saving equipment.

A definitive new study by the Insurance Institute for Highway Safety shows that in 14 big cities where the cameras were in use, including the District, the rate of fatalities stemming from red-light crashes fell three times faster than in 48 cities that did not install the cameras. What's more, the institute, a nonprofit group funded by the insurance industry, found that the cameras saved 159 lives in the 14 cities over five years starting in 2004. If the cameras had been in use in every big American city, 815 lives would have been saved during the same span, the researchers concluded.

Those findings will be discomfiting to the scofflaws and libertarians who have long believed they have a God-given right to run red lights without the nuisance of risking a fine. They have felt put upon that the government is somehow invading their privacy by training cameras on intersections or "profiting" from the resulting fines. Never mind that in the great majority of cases, the real victims are not the drivers who ignore the red lights; rather, they are the pedestrians, cyclists and drivers of other vehicles who are run over, rammed, maimed and killed by the red-light runners.

The rationale for red-light cameras is firmly grounded in common sense. Police can't be everywhere, and officers should not be diverted from high-crime areas to police every high-risk intersection. As practically anyone who travels in and around the District can see for themselves, drivers tend to decelerate and exercise caution in red-light and speed-camera zones - which are listed on the police department's Web site. The result: slower-moving traffic and fewer fatal accidents.

Gnashing their teeth at Big Brother's supposed intrusion, opponents of the cameras have argued that the cameras violate their privacy or that local governments use them simply to generate revenue. But there are plenty of examples of government levying fines to promote public safety - think of hunting violations, or unsafe job-site conditions - and there's no greater reason to impugn officials' motives in deploying the cameras than any in other areas of public safety administration.

Opponents have also cited studies linking the installation of red-light cameras to an increase in rear-end collisions. But the more important point is that the cameras have sharply reduced T-bone crashes, which are far more dangerous and cause more deaths.

The real question for those who continue to complain about the cameras is: What is the alternative? Do they really want to remove the cameras and accept hundreds more deaths in order to save red-light runners from paying fines of \$50 or \$100? By that calculus, opponents of red-light cameras must value life very cheaply indeed.

From: Greg Parks [Greg.Parks@atsol.com]
Sent: Sunday, February 20, 2011 10:53 AM
To: James R. Borgmann; Ronald K. Gorland; Pete Baan; Jan Seiden
Subject: FW: Red Light Cameras Reduce Crashes in Orlando by 39% at Intersections With Cameras
Attachments: Red Light Cameras Reduce Crashes in Orlando.pdf

WFTV.com News

Red Light Cameras Reduce Crashes In Orlando

Posted: 4:21 pm EST February 19, 2011

ORLANDO, Fla. -- New numbers show that red light cameras in Orlando have reduced crashes nearly 40 percent. This news comes weeks after a national report found the cameras have reduced deaths 24 percent nationwide.

Orlando city officials say the intersection of Conroy Road and Vineland Avenue is one of the most dangerous intersections in Orlando. But this new data shows even accidents at that specific location are down.

The new numbers WFTV obtained shows accidents are down 39 percent at intersections with cameras.

There are already 19 intersections with cameras and Eyewitness News found out the city is working on adding more to major intersections along Kirkman Road and Colonial Avenue, which are state roads that were off limits before legislation gave its blessing to the program last year.

The plan could include taking cameras out of service at intersections that have seen fewer crashes. Those cameras would be moved to problem areas.

But some drivers are still not happy with the red light cameras.

"Next thing you know you're going to have a liability just leaving your house because you might run a simple red light so I'm not a big fan of it, period," said Dayo Apenn.

The city has issued more than 60 thousand citations and only about 100 of those have been thrown out.

\$6 million in fines have been collected since the program started three years ago. The majority of that money goes directly to the state of Florida.

Greg Parks | Senior Vice President

Business Development | Public Safety Solutions

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Scottsdale | New York City | Philadelphia | St. Louis | Houston | Washington DC |

Red-light cameras are costing Pines

By Ariel Barkhurst
STAFF WRITER

PEMBROKE PINES — Red-light cameras might end up being a money loser for the city.

The cost of running the cameras and prosecuting the tickets issued to those caught on camera running red lights has been higher than the amount of cash brought in from paid citations.

The 1,555 tickets generated from July to January by the city's four cameras brought in \$76,294, City Attorney Sam Goren wrote in a memo to the commission. Yet the city spent \$83,337 to run the program during the same period. Costs include legal fees, city employee time and payments to American Traffic Solutions, the company that runs the cameras.

The city installed cameras in November and January at three intersections; one camera has been active since 2008. The fine for being photographed running a red light is \$158, of which the city gets \$75.

Commissioners on Wednesday said they would reconsider the program in April. Topics up for discussion will include mov-

ing the cameras to intersections where there may be more violations, whether to install the remaining 21 cameras and the contract with ATIS.

When the city voted to install 25 cameras last year, critics said the city was using a safety measure to pad its bank account.

"I don't want it to seem the only thing here is a revenue issue," said Commissioner Iris Siple. "But to have those cameras up there to ensure safety, there is a cost involved. So we do have to have a revenue stream."

One reason for the high costs, said Assistant City Attorney Mike Cirullo, is that the Broward County judge hearing appeals required cities to supply legal council. Legal fees have cost the city \$33,189 since the program began. Starting Feb. 1 the cases are being heard in traffic court.

Most commissioners are sure the program will end up at least breaking even.

"It sounds to me like this is the sometimes annoying but in a sense inevitable growing pains that a thing goes through when it's new and being introduced," said Commissioner Angelo Casillo.

Red-light cameras not living up to billing

Counting the cost

Pembroke Pines is spending more on red-light cameras and prosecuting tickets than it is receiving from paid citations. **Local, Page 2**

"The statistics are troubling," Mayor Jack Seiler said. "The revenue side ... won't be there unless something drastically changes at the courthouse or in the Legislature."

The Police Department has reviewed tapes in almost 20,000 cases in five months to decide whether to issue citations and threw out 12,000. The main reason: Courts are not allowing any citation that involves making a right turn on red whether the driver came to a stop or not.

— **Scott Wyman**

CC: CITY COUNCIL
CITY MANAGER
ASSISTANT CITY MANAGER
CITY ATTORNEY

F.Y.I.

PETER 3AAN
Chief of Police

PEMBROKE PINES

Red-light cameras bleed red ink

■ One city's red-light camera program has cost more than it has generated in the past six months, due to unforeseen legal fees.

BY DANIEL CHANG
dchang@miamiherald.com

Red-light cameras at four Pembroke Pines intersections have led to more than 1,500 tickets issued to drivers in the past six months, but the city's legal fees for enforcing the citations in Broward court mean the controversial program has cost more money than it generates — forcing commissioners to once again defend the program as a lifesaver, and not a moneymaker.

"We believe it's all about saving lives," Mayor Frank Ortiz said following a Wednesday night meeting at which City Attorney Sam Goren reported he will bill the city \$33,189 in legal fees related to the program.

The cost of the program since July has been \$63,247 — with \$50,158 going to American Traffic Solutions, the company contracted to install the cameras in Pembroke Pines; and the remainder going for legal fees.

But the four cameras have generated only \$76,294 in revenues.

The legal fees, Goren wrote in a memo to commissioners, are the result of two issues: the start-up costs of adhering to a state law that took effect July 1 governing red-light cameras; and the hours that city attorneys have spent attending court hearings, as required by a Broward judge, for drivers who challenge

• TURN TO CAMERAS, 2B

The Miami Herald

SUNDAY, FEBRUARY 20, 2011 | EDITOR: JAY DUCASSI | ducassi@miamiherald.com | 305-376-3557

H3

LOCAL & STATE

4B | PLAN FOR SHORTER HIGH-SPEED RAIL SNUBBED

5B | JUPITER FEARS LOSING BASEBALL TEAMS

CC CITY COUNCIL
CITY MANAGER
ASSISTANT CITY MANAGER
CITY ATTORNEY

F.Y.I.
[Signature]

City losing money on red-light cameras

• CAMERAS, FROM 1B

the tickets.

Commissioner Carl Shechter argued that ATS should bear the cost of providing an attorney for the hearings, all of which are held at the Broward North Regional Courthouse in Deerfield Beach before Judge Steven P. Deluca, who has required a plaintiff's attorney be present at the hearings.

"Seems to me that's your obligation, not ours," Commissioner Carl Shechter said to Greg Parks, an ATS vice president at this week's meeting.

"We don't have standing," Parks replied.

Shechter countered that it is ATS' contractual responsibility to issue the summons, process the paperwork and collect the revenues. He asserted that defending against challenges court is part of the collection process.

Ray Allen, an attorney representing ATS, disagreed. The company is ob-

ligated to provide "expertise" under its contract with the city, Allen said, but not legal representation.

Allen added that Broward is the only county in Florida where a judge has required a plaintiff's attorney be present to answer questions and defend challenges to red-light camera tickets.

Commissioners, who were considering whether to renegotiate the city's contract with ATS to account for the unforeseen legal fees, voted to revisit the question in April.

Several pending issues could affect similar red-light camera program in cities across South Florida, including Hallandale Beach, Hollywood and Aventura.

Among them: Bills in the state legislature proposing to repeal the red-light camera law; and the possibility that Broward cases will no longer be heard by a single judge but by a magistrate, Shechter said.

Traffic enforcement is generally the responsibility of the state and not cities.

But cities such as Pembroke Pines found a loophole by issuing code violations — instead of traffic citations — for failure to heed a red light.

Each violation, which cites the owner of the car and not necessarily the driver, imposes a \$158 fine if paid in the first 30 days. After 30 days, unpaid notices are forwarded to Broward County Court, and the fine increases to \$275 — with the additional costs tacked on for court fees.

Under the contract with ATS, Pembroke Pines receives \$75 per ticket paid, and the state receives \$83.

The city then pays ATS a monthly fee of \$4,750 per camera — or \$123,500 once all of the planned 26 cameras are operating.

If the cameras fail to generate enough revenue to cover the monthly cost, however, then the city does not have to pay ATS.

But the unforeseen legal fees are now causing city officials to reconsider the program, and their options range from renegotiating or canceling the ATS contract to moving red-light cameras to intersections where they may produce more tickets.

Shechter, who represents the city's east side, said he frequently speaks to constituents who are opposed to the red-light cameras.

"The people that I talk to say, 'What's with the red light cameras? What do we need those for?'" he said.

Shechter said he's convinced the city is doing it for the right reasons, but he would prefer the program

pay for itself.

"If the city is going to lose money," he said, "I think we can do it better by putting a couple more cops on the streets and letting them write tickets and doing it the right way."

Ortis said he is confident the city will find a way to make the red-light camera program work, and insisted that it's necessary.

"I want to install 25 more cameras," he said. "We'd like it to be revenue neutral, obviously. But we certainly want these cameras to be active so that people do not run these red lights. And it's prolific in our city. I mean, I see it every day and people just don't seem to care."

To underscore the problem, Commissioner Angelo Castillo said he was involved in a traffic accident Thursday morning with a motorist who allegedly ran a red light at 186th Avenue and Pines Boulevard.

A white van T-boned a green sedan making a left turn, Castillo said, and the van then barreled toward his car, swiping the rear.

Castillo was not injured, but he said the driver and passenger of the green sedan suffered severe lacerations and other injuries.

"This stuff at red lights is getting out of control," he said. "This is what's been going on, and I know that people are focusing on the money. But I just want the roads to be safe again."

Commissioners have not considered placing a camera at the intersection.

PRESIDENTS' DAY

Monday is Presidents' Day. Here's what's open and closed in Miami-Dade and Broward counties:

Federal offices.....	Closed
County offices.....	Closed
School.....	Closed
Garbage collection.....	Regular schedule in most cities
Banks.....	Closed
Post offices ..Closed (Only Express mail will be delivered)	
Stock markets.....	Closed
Buses and Tri Rail.....	Regular schedule
Libraries.....	Closed

It could be lights out soon on South Florida's red light cameras.

Officials say the tickets being issued by the cameras are becoming too costly to enforce, with some cities actually losing money on them as drivers who fight the tickets are winning in court.

Cities in Palm Beach and Broward counties have had to devote more attorneys and police to pursue the tickets as they spend thousands more than they are collecting.

"The rulings have been going against us, and it's been very labor-intensive for our department,"

Fort Lauderdale Police Chief Frank Adderley told the *Sun-Sentinel*.

Drivers Fighting Red Light Tickets...And Winning



Drivers Fighting Red Light Tickets...And Winning

Red Light Camera Captures Near Miss in Miami



Red Light Camera Captures Near Miss in Miami

Red Light Cam Controversy



Red Light Cam Controversy

The network of cameras from Fort Lauderdale to Pembroke Pines were installed to much fanfare and were supposed to bring in millions of dollars in revenue, but have become more trouble than they're worth.

Pembroke Pines has received \$76,294 from citations, but the red-light camera program has cost \$83,337. Legal fees encompassed \$33,189 of that, with the rest going to American Traffic Solutions, which has contracts across Broward and Palm Beach counties to manage the cameras. The failures there have cities like Boca Raton and Delray Beach delaying plans to install cameras. But in Boynton Beach, officials are moving ahead with their plans to install intersection cameras. And in Hallandale Beach, Mayor Joy Cooper says they'll keep the red light camera program going. "For me, it has always been a safety issue period," Cooper said. "We have cameras in our parks and other public facilities, and this is a natural progression of technology to enforce our laws. We have busy roadways and a lot of pedestrians, and I believe it will make the roads safer."

FEB 28, 2011



City of Miami Springs Interoffice Memo

DATE: February 24, 2011

TO: The Honorable Mayor Billy Bain and Members of the City Council

FROM: James R. Borgmann, City Manager *JRB*

RE: Thoughts on Constructing a Garage on the Surface Lot behind the Post Office

I have been doing research on the costs of constructing a garage behind the post office. The following basic assumptions are made:

1. The entire lot would be used (270' by 110'), including the "police lot" (paid with LETF \$\$\$), and the private lot on the east end (we would seek air rights above and make improvements to the existing ground floor space).
2. A four floor structure (floor of the 4th floor, or roof, would be at 30+ feet) would yield a total square footage of roughly 118,000 sq. ft. A three floor structure would yield about 89,000 square feet.
3. I looked at 21 garage projects in south Florida and the northeastern US ranging from 70,000 sq. ft to 1,100,000 sq. ft., with total spaces of 225 to 6,000. On average, these garages worked out to about 310 square feet per space. This includes lost space for structural columns, ramps, driving lanes, etc.
4. Taking that 310 sq. ft. average and dividing it into our estimated 118,000 sq. ft., I come up with 380 spaces on four floors. The highest square footage per space was about 365, which, if applied to our footprint, would yield 323 spaces on four floors. Those numbers would be reduced by 80-90 spaces in the three floor configuration.
5. The existing surface lot currently contains 75 spaces, so the estimated net gain of spaces would be about 305, or in the worst case, about 250 spaces for the four floor configuration.
6. The average cost per space showed a wide variance (\$5,635 to \$24,715) among these projects, but a relatively safe average would be about \$15,000 per space.

7. Therefore, based on existing garages constructed in the last five years, our cost for a new 380 space garage would be about \$5,700,000. If only 323 spaces could be built, the cost would be estimated at about \$4,845,000.

Going with a three floor configuration, the prices would be about \$4,305,000 and \$3,660,000.

8. Please recall that we have already approached the CITT office and they have given a "thumbs down" on fully funding such a garage. We still may be able to convince them that a percentage of the structure would serve those people using public transit. Something as small as ten percent of the smallest cost estimate above could still yield \$366,000.

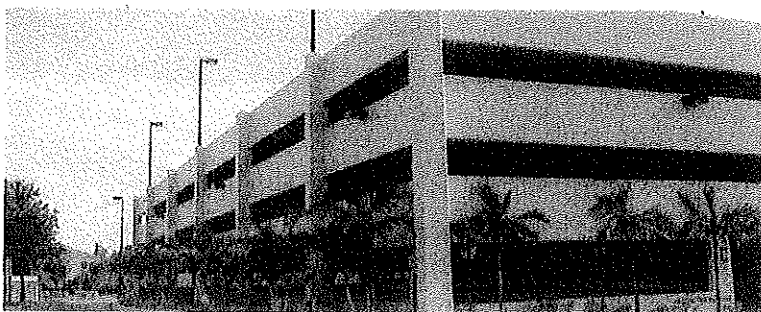
The attached spreadsheet lists the specific garages that I was able to research via the Internet.

Comparative Costs of Parking Garges

<u>Location</u>	<u># spaces</u>	<u>Sq. Feet</u>	<u># Levels</u>	<u>Cost</u>	<u>Sq. Ft / space</u>	<u>Cost/space</u>
Marlin Stadium	6,000	NA	NA	\$ 75,000,000	NA	\$ 12,500
Univ. South Florida	2,000		8	\$ 18,000,000		\$ 9,000
Tampa	1,450	NA	NA			\$ -
UCF	1,326	400,000		\$ 14,000,000	302	\$ 10,558
Lincoln Road	484	176,000	6		364	\$ -
Mt. Sinai	491		6			\$ -
Ft. Laud Tri-rail	400					\$ -
Ft. Pierce	471	126,077		\$ 11,380,000	268	\$ 24,161
Broward Med Center	1,429		7			\$ -
CMB	500			\$ 7,200,000	-	\$ 14,400
Cleveland VA Med Center	362	115,200		\$ 4,800,000	318	\$ 13,260
Pennsylvania Casino 1	3,200	1,100,000		\$ 40,000,000	344	\$ 12,500
New York Hospital	700	216,000		\$ 17,300,000	309	\$ 24,714
Pennsylvania Casino 2	1,000	327,000		\$ 13,600,000	327	\$ 13,600
Pittsburg Govt Offices	726	NA		\$ 10,500,000	-	\$ 14,463
Penn State	180	52,560		\$ 4,000,000	292	\$ 22,222
Pennsyl. Govt	850	250,000		\$ 11,795,810	294	\$ 13,877
West Virginia Hospital	355	NA		\$ 2,000,000	-	\$ 5,634
Syracus NY Commercial	963	270,000		\$ 6,900,000	280	\$ 7,165
WV Commercial	225	70,000		\$ 3,500,000	311	\$ 15,556
Pitt Medical Center	535	NA		\$ 8,320,000		\$ 15,551
AVERAGE					310	\$ 14,323
Proposed MS Garage Max	380	118,000		\$ 5,442,550		
Proposed MS Garage Min	323	118,000		\$ 4,626,168		

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Northwest Regional Medical Center Design/Build Garage

[View Gallery](#)

This design/build project is a four story 228 car parking garage at the hospital campus of Northwest Medical Center. It is an open garage design using twin tees for the structural floor system and precast wall panels with a double-loaded single ramp going up to the top level. The garage was designed and engineered to accommodate an additional two stories in future expansion.

Project Details

Project: Northwest Regional Medical Center
Design/Build Garage

Client: Northwest Medical Center

Contract Type: GMP

Square Footage: 100,000 SF / 228 spaces

Actual/Expected Completion Date: March
2008

Project Photo Gallery

Close



The City of Miami Springs has an interest in building a multi-level parking structure on an existing surface lot located behind 151 Westward Drive. The dimensions of the lot are approximately 110 feet by 270 feet, or about 29,700 square feet. The attached aerial photo represents the current configuration of the existing surface lot, which contains 75 spaces.

Our current needs warrant a minimum of 3 levels (ground plus 2), but we would also be interested in building an additional level for future growth of our downtown.

This area abuts a residential street and an alley between the lot and the commercial sector along Westward Drive, so attention must be given to the aesthetics of the structure, especially on the residential (north) side.

Regarding entrance(s), exit(s), ramp(s), and elevator(s); the City considers this part of the design proposal. However, as there is an elementary school near the northwest corner of the proposed garage, it would be advisable to design the entrance(s) and exit(s) with that in mind.

Obviously, ADA considerations must be included that would take into account the requirements laid out in Florida Statutes regarding the

) number of spaces required and the size/configuration/location of those spaces.

The City will consider proposals of varying construction methods, i.e., prefab concrete, poured concrete, cbs, steel etc., as long as the structure is built to the standards in the Florida Building Code.

Time estimates: Design, permitting, construction. Turnkey operation.

) City will provide survey(s) and soil tests.

) A portion of the existing lot is privately owned. That section is noted on the aerial photo. The City will be responsible for entering into some form of agreement with the owner for the air rights above, and for the improvements to those existing spaces.



RESOLUTION NO. 2011-3506

City Council Meeting of:

2-28-2011



A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MIAMI SPRINGS AUTHORIZING THE PROPER OFFICERS AND OFFICIALS OF THE CITY TO EXECUTE A COMMUNITY DEVELOPMENT BLOCK GRANT ("CDBG") CONTRACT BETWEEN THE CITY OF MIAMI SPRINGS AND MIAMI-DADE COUNTY WHICH PROVIDES FOR AN ADDITIONAL \$25,000 IN GRANT FUNDS FOR THE REHABILITATION OF THE CITY SENIOR CENTER; AUTHORIZING AND APPROVING THE CITY'S ACCEPTANCE OF THE MIAMI-DADE COUNTY CDBG ADDITIONAL GRANT FUNDING OF \$25,000; EFFECTIVE DATE.

WHEREAS, the City of Miami Springs previously applied with Miami-Dade County for an award of "CDBG" funds for the rehabilitation of the City Senior Center; and,

WHEREAS, through the efforts of Miami-Dade County Commissioner Rebeca Sosa, the City was awarded \$96,350.00 in grant funds by Board of County Commissioner's Resolution No. R-1127-8 on October 21, 2008; and,

WHEREAS, following acceptance of the grant by City Resolution No. 2009-3438, the "CDBG" funds have been utilized by the City for the rehabilitation and repair of the City Senior Center roof, kitchen and bathrooms; and,

WHEREAS, additional grant funding of \$25,000 has been authorized by Miami-Dade County and made available to the City upon execution of a grant contract for the additional funding which further specifies a maximum grant amount of \$121,350.00 to the City; and,

WHEREAS, the aforesaid additional \$25,000.00 in grant funds are needed to complete the previously authorized Senior Center rehabilitation project; and,

WHEREAS, the City Council of the City of Miami Springs has determined that it is in the best interests of the City and its citizens to accept the additional "CDBG" funding previously described herein:

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MIAMI SPRINGS, FLORIDA:

Section 1: That the City Council of the City of Miami Springs hereby authorizes the proper officers and officials of the City to execute the Community Development Block Grant ("CDBG") Contract between the City and Miami-Dade County which provides an additional \$25,000.00 in grant funds for the rehabilitation of the City Senior Center.

Section 2: That the City Council of the City of Miami Springs hereby approves and authorizes the City's acceptance of the Miami-Dade County "CDBG" funding of an additional \$25,000 for the rehabilitation of the City Senior Center.

Section 3: That the provisions of this Resolution shall be effective immediately upon adoption by the City Council.

PASSED AND ADOPTED by the City Council of the City of Miami Springs, Florida, this 28th day of February, 2011.

The motion to adopt the foregoing resolution was offered by _____, seconded by _____, and on roll call the following vote ensued:

Vice Mayor Ator
Councilman Best

" "
" "

Councilman Espino
Councilman Lob
Mayor Bain

"____"
"____"
"____"
"____"

Billy Bain
Mayor

ATTEST:

Magali Valls, CMC
City Clerk

APPROVED AS TO LEGALITY AND FORM:



Jan K. Seiden, City Attorney



City of Miami Springs Interoffice Memo

DATE: February 24, 2011

TO: Mayor Billy Bain and Members of the City Council

FROM: James R. Borgmann, City Manager *JRB*

RE: Discussion Regarding District Boundary Regulations for the Abraham Tract

In light of a potential development in the Abraham Tract, several of you have asked that we put an item on the February 28 agenda to discuss the practicality of having Calvin Giordano look at this area ASAP and see how we can implement certain district boundary regulations currently under consideration for NW 36th Street for this area as well.

Agenda Item No.

City Council Meeting of:

FEB 28, 2011



City of Miami Springs Interoffice Memo

DATE: February 24, 2011

TO: Mayor Billy Bain and Members of the City Council

FROM: James R. Borgmann, City Manager *JRB*

RE: Consideration of "policy" to not host candidate forums on city property

I sent you each an email on February 8 asking about hosting this year's candidate forum in the Rebeca Sosa Theater. I did not hear back from anyone except the Mayor. With time being tight, and having been asked the question again by the forum organizers, I bring this to you tonight for your decision.

A question has been asked from the Woman's Club and Chamber of Commerce if it would be ok to hold this year's candidate forum in the Sosa Theater. In the past we have not hosted such events on city property, but then we never had a community center like we have today ever before.

If you would like, I can place this as a discussion item on the 14th. Let me know please.

Thanks,

Jim

Agenda Item No. 11

City Council Meeting of:

FEB 28, 2011

